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Bergman

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(54) **CHRYSANTHEMUM PLANT NAMED
'IVORY YOEUGENE'**

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patent is extended or adjusted under 35
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(58) **Field of Search** **Plt./295, 294**

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(57) **ABSTRACT**

A distinct cultivar of Chrysanthemum plant named 'Ivory
Yoeugene', characterized by its upright, outwardly spread-
ing and uniformly mounded plant habit; freely branching,
dense and full plants; dark green foliage; uniform flowering;
early flowering, eight-week response time; freely flowering
with about six inflorescences per lateral stem; daisy-type
inflorescences that are about 7.6 cm in diameter; ivory-
colored ray florets and bright yellow disc florets; and excel-
lent postproduction longevity with inflorescences and leaves
maintaining good substance and color for about three or four
weeks in an interior environment.

2 Drawing Sheets

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BACKGROUND OF THE INVENTION

The present Invention relates to a new and distinct culti-
var of Chrysanthemum plant, botanically known as *Den-*
dranthea grandiflora and hereinafter referred to by the
cultivar name Ivory Yoeugene.

The new Chrysanthemum is a product of a mutation
induction breeding program conducted by the Inventor in
Fort Myers, Fla. The objective of the program is to create
new Chrysanthemum cultivars with desirable inflorescence
form and floret colors, good substance, and excellent post-
production longevity.

The new Chrysanthemum originated by exposing
unrooted cuttings of the Chrysanthemum cultivar Yoeugene,
disclosed in U.S. Plant Pat. No. 11,917, to X-ray radiation in
September, 1997, in Fort Myers, Fla. Following the radiation
treatment, the cuttings were rooted and terminal apices were
removed (pinched) three times to promote lateral branch
development. After lateral branches from the third pinch
reached sufficient size, terminal cuttings were harvested,
planted and flowered in a controlled environment in Fort
Myers, Fla. The new Chrysanthemum was discovered and
selected by the Inventor as a single flowering plant within
this population in March, 1998. The selection of this plant
was based on its desirable inflorescence form and ray floret
color.

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Asexual reproduction of the new Chrysanthemum by
terminal cuttings harvested in a controlled environment in
Fort Myers, Fla, has shown that the unique features of this
new Chrysanthemum are stable and reproduced true to type
in successive generations.

SUMMARY OF THE INVENTION

The cultivar Ivory Yoeugene has not been observed under
all possible environmental conditions. The phenotype may
vary somewhat with variations in environment such as
temperature, daylength and light intensity, without,
however, any variance in genotype.

The following traits have been repeatedly observed and
are determined to be the unique characteristics of 'Ivory
Yoeugene'. These characteristics in combination distinguish
'Ivory Yoeugene' as a new and distinct Chrysanthemum:

1. Upright, outwardly spreading and uniformly mounded
plant habit.
2. Freely branching, dense and full plants.
3. Dark green foliage.
4. Uniform flowering.
5. Early flowering, eight-week response time.
6. Freely flowering; about six inflorescences per lateral
stem.

7. Daisy-type inflorescences that are about 7.6 cm in diameter.
8. Ivory-colored ray florets and bright yellow disc florets.
9. Excellent postproduction longevity with inflorescences and leaves maintaining good substance and color for about three or four weeks in an interior environment.

Compared to plants of the parent cultivar, Yoeugene, ray florets of plants of the new *Chrysanthemum* are ivory in color whereas ray florets of plants of the cultivar Yoeugene are rose pink in color. In addition, plants of the new *Chrysanthemum* flower about one or two days later than plants of the cultivar Yoeugene.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new *Chrysanthemum* showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ from the color values cited in the detailed botanical description which more accurately describe the actual colors of the *Chrysanthemum*.

The photograph at the top of the first sheet comprises a top perspective view of a typical flowering plant of 'Ivory Yoeugene'.

The photograph at the bottom of the first sheet comprises a close-up view of upper (left) and lower (right) surfaces of typical inflorescences and upper (left) and lower (right) surfaces of typical leaves of the cultivar Ivory Yoeugene.

The photograph at the top of the second sheet comprises a side perspective view of typical flowering plants of 'Ivory Yoeugene' (left) and 'Yoeugene' (right).

The photograph at the bottom of the second sheet comprises a close-up view of typical inflorescences of plants of 'Ivory Yoeugene' (left) and 'Yoeugene' (right).

DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to The Royal Horticultural Society Colour Chart except where general terms of ordinary dictionary significance are used. The following observations and measurements describe plants grown and flowered during the Autumn in Leamington, Ontario, Canada, under greenhouse conditions which approximate those generally used in commercial potted *Chrysanthemum* production. Four unrooted cuttings were directly stuck in a 15-cm container and pinched once. Plants used for this description were grown as center budded-types. Measurements and numerical values represent averages of typical flowering plants.

Botanical classification: *Dendranthema grandiflora* cultivar Ivory Yoeugene.

Commercial classification: Daisy center budded-type potted *Chrysanthemum*.

Parentage: Induced mutation of the *Dendranthema grandiflora* cultivar Yoeugene, disclosed in U.S. Plant Pat. No. 11,917.

Propagation:

Type.—Terminal tip cuttings.

Time to rooting.—Seven to ten days with soil temperatures of 21° C.

Rooting habit.—Fine, fibrous and well-branched.

Plant description:

Appearance.—Herbaceous daisy potted *Chrysanthemum* typically grown as a center budded-type.

Inverted triangle; stems upright and outwardly spreading giving a uniformly mounded appearance to the plant. Freely branching; about three or four lateral branches develop after removal of terminal apex (pinching); dense and full plants.

Plant height.—About 30 cm.

Plant width.—About 44 cm.

Foliage description.—Arrangement: Alternate. Length: About 7.2 cm. Width: About 5.2 cm. Apex: Cuspidate. Base: Cuneate. Margin: Palmately lobed, sinuses between lateral lobes mostly divergent. Texture: Upper and lower surfaces with very fine pubescence; veins prominent on lower surface. Petiole length: About 2.7 cm. Petiole diameter: About 3 mm. Color: Young foliage upper surface: 147A. Young foliage lower surface: Slightly darker than 147B. Mature foliage upper surface: 147A, shiny. Mature foliage lower surface: 147B. Venation upper surface: 147A to 147B. Venation lower surface: 147B.

Inflorescence description:

Appearance.—Daisy inflorescence form with elongated oblong-shaped ray florets. Inflorescences borne on terminals above foliage. Disk and ray florets arranged acropetally on a capitulum.

Flowering response.—Under natural conditions, plants flower in the autumn/winter in the Northern Hemisphere. At other times of the year, inflorescence initiation and development can be induced under short day/long night conditions (at least 13.5 hours of darkness). Plants exposed to three weeks of long day/short night conditions after planting followed by photoinductive short day/long night conditions flower about eight weeks later; early flowering.

Postproduction longevity.—Inflorescences and leaves maintain good color and substance for about three or four weeks in an interior environment.

Quantity of Inflorescences.—Freely flowering; about six inflorescences per lateral stem and about 22 inflorescences per plant.

Inflorescence bud.—Height: About 7 mm. Diameter: About 8 mm. Color: Close to 143A.

Inflorescence size.—Diameter: About 7.6 cm. Depth (height): About 1.5 cm. Diameter of disc: About 1.9 cm.

Ray florets.—Shape: Elongated-oblong. Orientation: Initially upright, then about 15 to 20° to horizontal. Length: About 3.4 cm. Width: About 1 cm. Apex: Acute to emarginate. Margin: Entire. Texture: Smooth, glabrous, satiny. Number of ray florets per inflorescence: About 24. Color: When opening: Close to 2C to 2D. Fully opened, upper surface: Close to 2C to 2D. Fully opened, lower surface: Close to 2D.

Disc florets.—Shape: Tubular. Apex: Serrated. Length: About 7 mm. Width: Apex: About 2 mm. Base: About 1 mm. Number of disc florets per inflorescence: About 150. Color: Immature: 144A to lighter than 144A. Mature: Apex: Yellow, 7A to 9A. Mid-section: Lighter than 144A. Base: White, 155D.

Peduncles.—Aspect: Angled about 45 to 50° to stem. Length: First peduncle: About 3.75 cm. Fourth peduncle: About 7.2 cm. Diameter: About 3 mm. Texture: Pubescent. Color: 146A.

Reproductive organs.—Androecium: Present on disc florets only. Anther color: 9A. Pollen amount: None observed. Gynoecium: Present on both ray and disc florets.

Disease resistance: Resistance to pathogens common to Chrysanthemums has not been observed on plants grown under commercial greenhouse conditions.

Seed production: Seed production has not been observed.

It is claimed:

1. A new and distinct cultivar of Chrysanthemum plant named 'Ivory Yoeugene', as illustrated and described.

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